

**ACTION DESCRIPTION MEMORANDUM
FOR
REPLACEMENT OF TANKS T40, T66, T67, and T68
(MODIFICATION NO 1)**

Authorization Nos 300173, 380139 and 390141

EG&G Rocky Flats, Inc

Operating Contractor for
U S Department of Energy
Rocky Flats Office

June 1990

Preparer *Scott R. Muhl* 6/28/90

Facilities Project Management* *J. David M. Mott* 6/21/90

Safety Analysis Engineering* *Ben B. Southward*

Legal* *J. M. Mott* 6/28/90

NEPA Department* *Claire Rero* 6/27/90

NEPA Department Manager *Laura J. Frick* 6/28/90

Director, Environmental Restoration *Spencer* 6/30/90

* NEPA Compliance Committee

Reviewed for Classification *Lucy*
By *Lucy*
Date *6/28/90* *gof.*

ADMIN RECORD

A-0009-000136

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The following amends the Action Description Memorandum (ADM) [attached], submitted in August 1989, that discussed using three stainless steel tanks to replace Tank T40 (located inside Building 774) and Tanks T66, T67 and T68 (located adjacent to Building 774). Replacement of Tank T40 is adequately described in the original ADM and will not be addressed herein. However, additional complications, such as construction in a Solid Waste Management Unit (SWMU), resulted in changes to the original scope of activities required to install Tanks T66 and T67. Subsequently, this modification is being submitted to describe changes to the original scope. Only sections to the original ADM that have changed are described below. Refer to the original ADM for additional information.

1 0 PROPOSED ACTION (AMENDS SECTION 1 0)

This amendment to the proposed action only addresses installation of two new stainless steel tanks (T66 and T67) to replace the existing underground concrete tanks T66, T67, and T68 located adjacent to Building 774. The existing tanks can not be inspected, and were removed from service in September 1989, in order to comply with the Resource Conservation and Recovery Act (RCRA) regulations. The purpose of the proposed tanks is to store radioactive liquids, with high concentrations of nitrates, that cannot be treated in Building 774 and must be transferred to Building 374 for treatment. Without the storage capacity offered by the new tanks, the ability of Building 774 to continue treating other waste streams (in addition to those producing high nitrates) would be reduced. The capacity of the two new tanks, T66 and T67, will eliminate the need for the capacity associated with T68. The new tanks would be installed in Solid Waste Management Unit (SWMU) 124.

This action may qualify as a categorical exclusion applicable to " . waste management that require eligibility screening and documentation " for the following reason:

- 1 "Removal actions and actions similar in scope under the Resource Conservation and Recovery Act (RCRA) (including those taken as partial closure actions and those taken before corrective action). These removal actions and similar actions under RCRA could include, but are not limited to, the following types of actions:

- storage of wastes at facilities in compliance with RCRA, pending treatment (including incineration), recovery, or disposal,"

Further, the proposed action may be eligible for a categorical exclusion listed in 10 CFR 1021.413 and 1021.414 because

- 1 The proposed action is not part of, connected to, or similar to another proposed action that is subject to environmental assessment or environmental impact statement
- 2 The action does not threaten a violation of applicable statutory, regulatory, and permit requirements, including requirements of DOE orders
- 3 The action does not require siting and construction or expansion of waste disposal, recovery, or treatment facilities
- 4 The action does not adversely affect areas determined to be environmentally sensitive

1 2 DESCRIPTION OF THE ACTION (AMENDS SECTION 1.2)

The existing tanks were taken out of service in September 1989. Removal of existing tanks T66, T67, and T68 will be done as a future project.

Tanks T66, T67, and T68 will be functionally replaced by installing two (T66 and T67) above-ground 26,000-gallon tanks on the east side of Building 774, immediately east of the existing tanks. The project will require caissons for the epoxy-coated slabs used as a foundation for the new tanks. The foundation will be surrounded by an epoxy-coated containment berm, which will have a leak detection system. Two methods of piping have been proposed: above-ground, double-contained piping with a leak-detection system, and below-ground, double-contained piping with leak-detection system placed in a pipe chase. To eliminate problems that would accompany snow or rain accumulating within the area surrounding the tanks, a pre-engineered metal housing will be erected to cover the tanks and containment structure.

The two piping systems are being proposed equally, although the preferred system is the below-ground. The reason for this is the concerns associated with each piping system. The below-ground system will require construction in a SWMU. This will require special construction procedures (such as not removing any soil from the SWMU) and submitting a site sampling plan to the U.S. Environmental Protection Agency (EPA). The above-ground, double-contained piping is exposed and presents the potential for damage to the pipe and possible distribution of radioactive/hazardous solution. The two systems are being proposed equally so that an above-ground system can be implemented if the issues associated with construction in a SWMU in some way prevent installing the below-ground piping.

To facilitate construction of the new tanks, two underground process waste lines will be relocated as part of this project.

1 4 NEED FOR ACTION (AMENDS SECTION 1.4)

The tanks were removed from service in September 1989. The new tanks will provide additional storage for wastes going to Building 374. Although operations in Building 771

will not be stopped, there will be some curtailment of operations because there will not be adequate storage available for the excess wastes

2 0 CONSTRUCTION ISSUES (AMENDS SECTION 2 0)

The cuts and fills associated with construction of the containment structures, caissons, and tank foundation will be balanced so that soil will not have to be removed from the construction site. The pipe chase will require the excavation of 71 cubic yards of soil and asphalt. The excavated material will be left within the SWMU as either part of the construction or boxed for later disposal. This will comply with EPA recommendations that soil not be removed from SWMU sites. Following are suggestions for construction in a SWMU that may comply with the EPA recommendations.

- 1 Soil from the SWMU will not be removed from the construction site, and must be deposited in a manner that should not allow for the spread (by wind or water) of soil outside the SWMU.
- 2 Construction in a SWMU will require the preparation of and submittal to the EPA of a site sampling plan. After the EPA reviews the plan, site characterization sampling will be required and a health and safety plan prepared for work that will occur in the SWMU.
- 3 Soil in the SWMU that cannot be placed in the excavation, or spread and compacted on the surface, will be placed in boxes and stored on the SWMU site for later disposal.
- 4 The pipe chase will be enclosed at each end so that no contaminants are permitted to enter the chase.

Both the overhead piping and pipe chase will proceed in a northern direction from the location of the new tanks. The pipe chase will cross an asphalt driveway and temporarily block access to the building over tanks T66 and T67. Once the chase is in place, plating will be placed across the chase to provide a travel surface. The chase will be constructed of concrete. All walls will be lined with a resistant material such as epoxy to prevent infiltration of contaminants into the chase.

2 8 POSTULATED ACCIDENTS (AMENDS SECTIONS 2 8 AND 4 0)

This project may involve hazards classified as moderate per DOE Order 5481 1B, "Safety Analysis and Review System," which will require additional safety analyses to determine its impact on existing Final Safety Analysis Reports (SARs), need to develop a Preliminary SAR, or other safety analysis documentation.

2 9 ENVIRONMENTAL ISSUES (ADDITION TO SECTION 2.9)

All water collecting in trenches within the area of the SWMU will be collected for sampling and eventual disposal.

5 0 FISCAL AND SCHEDULE INFORMATION (AMENDS SECTION 5.0)

The total estimated cost for this action is \$1,230,000. Of the total cost, \$830,000 will be provided from FY89 Capital Funds, and \$400,000 will be provided from FY90 Capital Funds. Completion of the project is scheduled for FY91.